

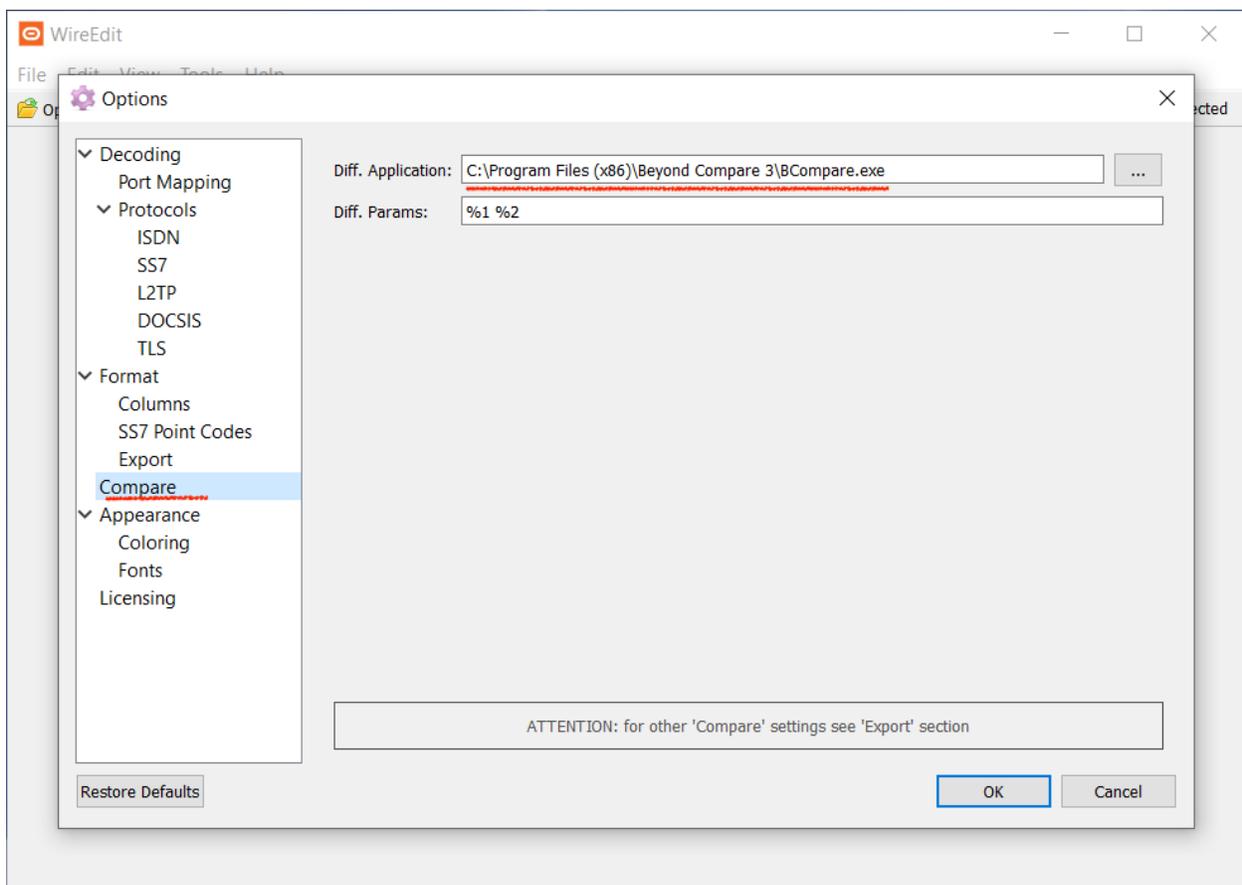
# WireEdit + Beyond Compare for Win10

12/24/2019

WireEdit and Beyond Compare allows visual side-by-side packet compare. One can compare selected packets from the same or different pcap files. The steps to enable this functionality for Win10 are listed below. One could set up WireEdit OSX and WireEdit Linux to work with Beyond Compare in the similar way.

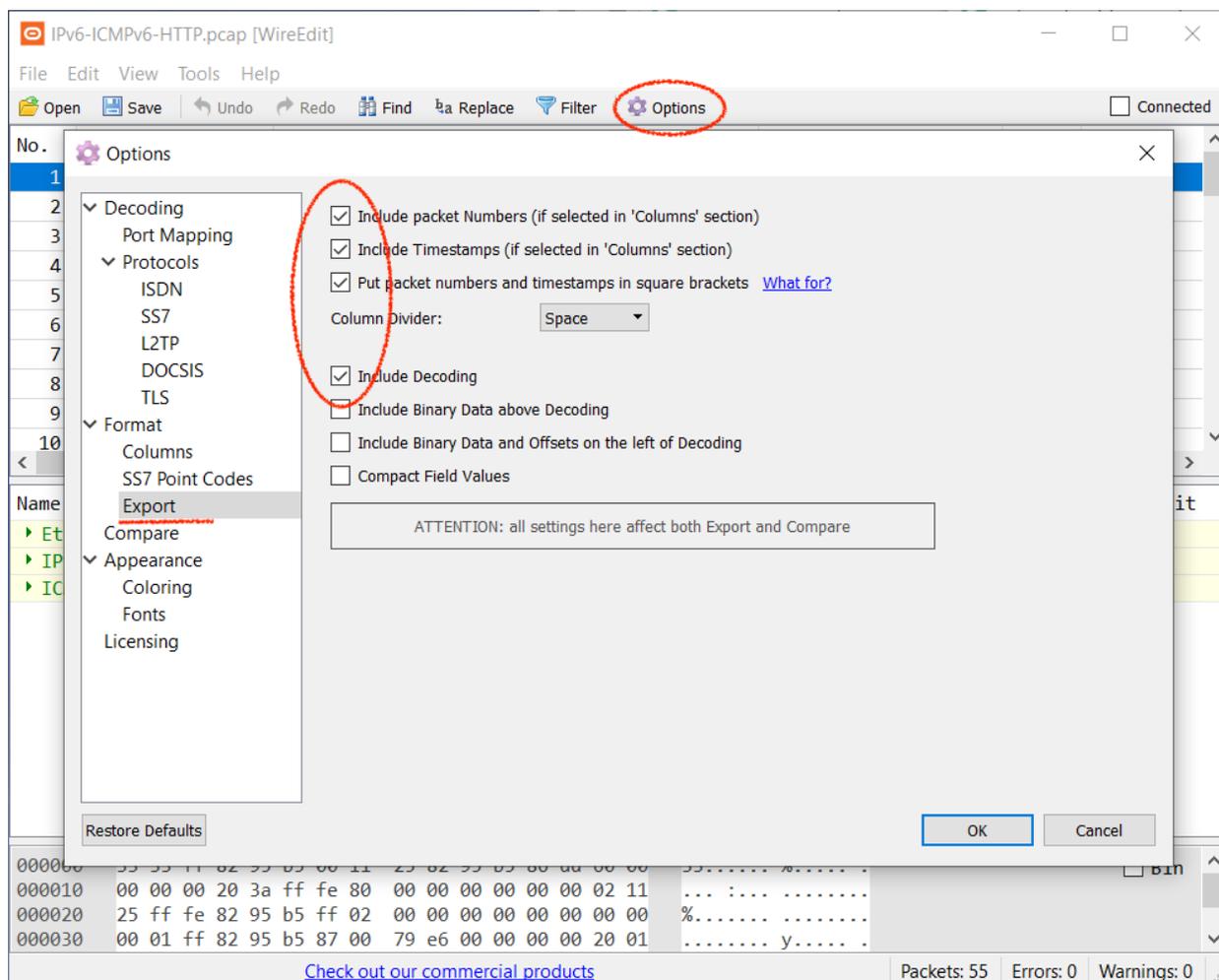
## Step 1

- a) Install Beyond Compare (<https://www.scootersoftware.com>).
- b) Install WireEdit 2.11 or later and launch it.
- c) Select Options icon at toolbar.
- d) In the left panel select Compare.
- e) Select the path to Beyond Compare in Diff. Application on the right.



## Step 2

- Select Export in the left panel
- Select the top four checkboxes on the right.



### Step 3

Open a pcap file and select packets to be compared. Select a packet as shown below, then select Set as Target to Compare from the context menu.

The screenshot shows the WireEdit application window titled "IPv6-ICMPv6-HTTP.pcap [WireEdit]". The interface includes a menu bar (File, Edit, View, Tools, Help) and a toolbar with icons for Open, Save, Undo, Redo, Find, Replace, Filter, and Options. A "Connected" checkbox is visible in the top right.

The main area displays a table of network packets. The table has columns for No., Relative Time, Source, Destination, Length, and Layers. Packet 1 is selected, and a context menu is open over it. The menu items are: Cut (Ctrl+X), Copy (Ctrl+C), Copy Headers, Copy Decoding, Paste (Ctrl+V), Hide Selected, Hide All But Selected, Show hidden packets, Delete Selected (Del), Delete All But Selected, Edit Time..., Time Reference, Edit Comment..., **Set as Target to Compare** (highlighted with a red circle), and Compare to Target.

Below the packet list is a packet details pane with columns for Name and Value. The details for the selected packet are: Ethernet II, IPv6, and ICMPv6: Neighbor Solicitation.

At the bottom, there is a hex dump of the packet data, a "Bin" checkbox, and a status bar showing "Packets: 55 Errors: 0 Warnings: 0". A link "Check out our commercial products" is also present.

## Step 4

Select the second one, then select Compare to Target from the context menu. Alternatively you could open another pcap file and select the second packet from there. **One could select multiple packets at each step.**

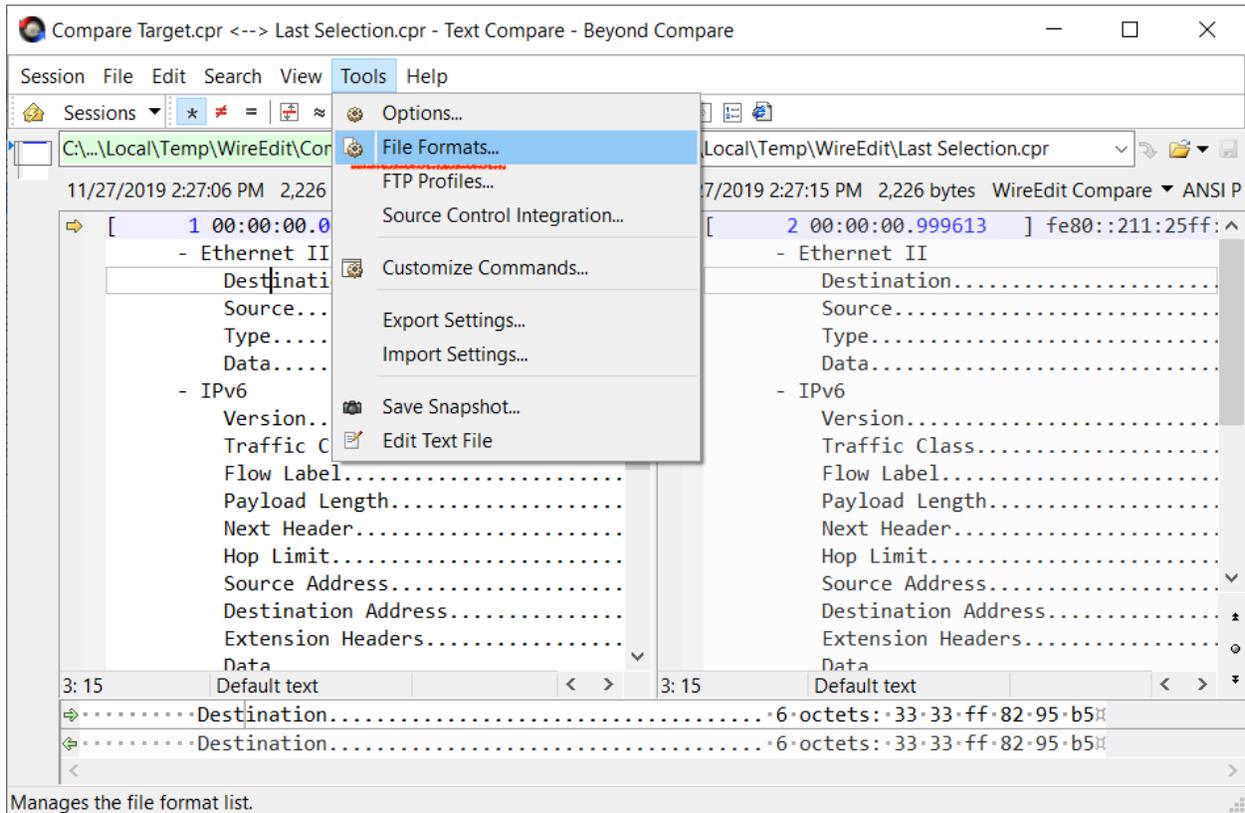
The screenshot shows the WireEdit application window titled "IPv6-ICMPv6-HTTP.pcap [WireEdit]". The main window contains a table of network packets. A context menu is open over the second packet (No. 3), with the "Compare to Target" option highlighted in blue and circled in red. The packet list table is as follows:

No.	Relative Time	Source	Destination	Length	Layers
2	00:00:00.999613	fe80::211:25ff:fe82:95b5	ff02::1:ff82:95b5	86	ICMPv6
3	00:00:01.999505	fe80::	ff02::1:ff82:95b5	86	ICMPv6
4	00:00:18.895689	fe80::	ff02::16	90	ICMPv6
5	00:00:19.315577	::	ff02::1:ff98:6e1	78	ICMPv6
6	00:00:20.446065	[2001:	353 [ff02::fb]:5353	211	UDP
7	00:00:20.447313	[2001:	353 [ff02::fb]:5353	192	UDP
8	00:00:20.705918	[2001:	353 [ff02::fb]:5353	211	UDP
9	00:00:20.955903	[2001:	353 [ff02::fb]:5353	211	UDP
10	00:00:20.957151	[2001:	353 [ff02::fb]:5353	192	UDP
11	00:00:21.156538	[2001:	353 [ff02::fb]:5353	199	UDP
12	00:00:22.026605	[2001:	353 [ff02::fb]:5353	202	UDP

Below the packet list, the "Name" pane shows the protocol stack for the selected packet: Ethernet II, IPv6, and ICMPv6: Neighbor Solicitation. At the bottom of the window, a hex dump shows the raw packet data, and the status bar indicates "Packets: 55 Errors: 0 Warnings: 0".

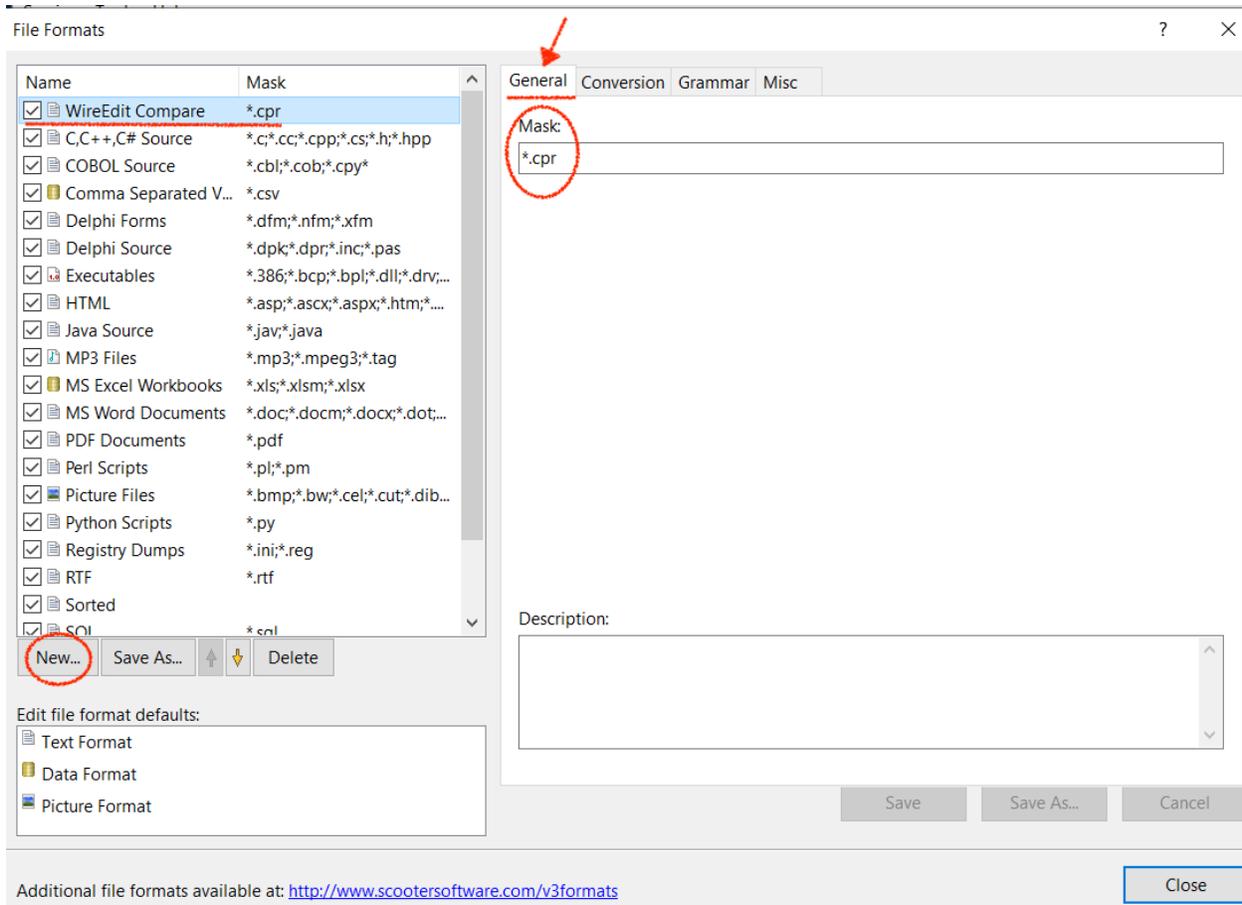
## Step 5

- a) Beyond Compare should start at this point. If not, go back to Step 1.
- b) Select File Format from Tools top menu.



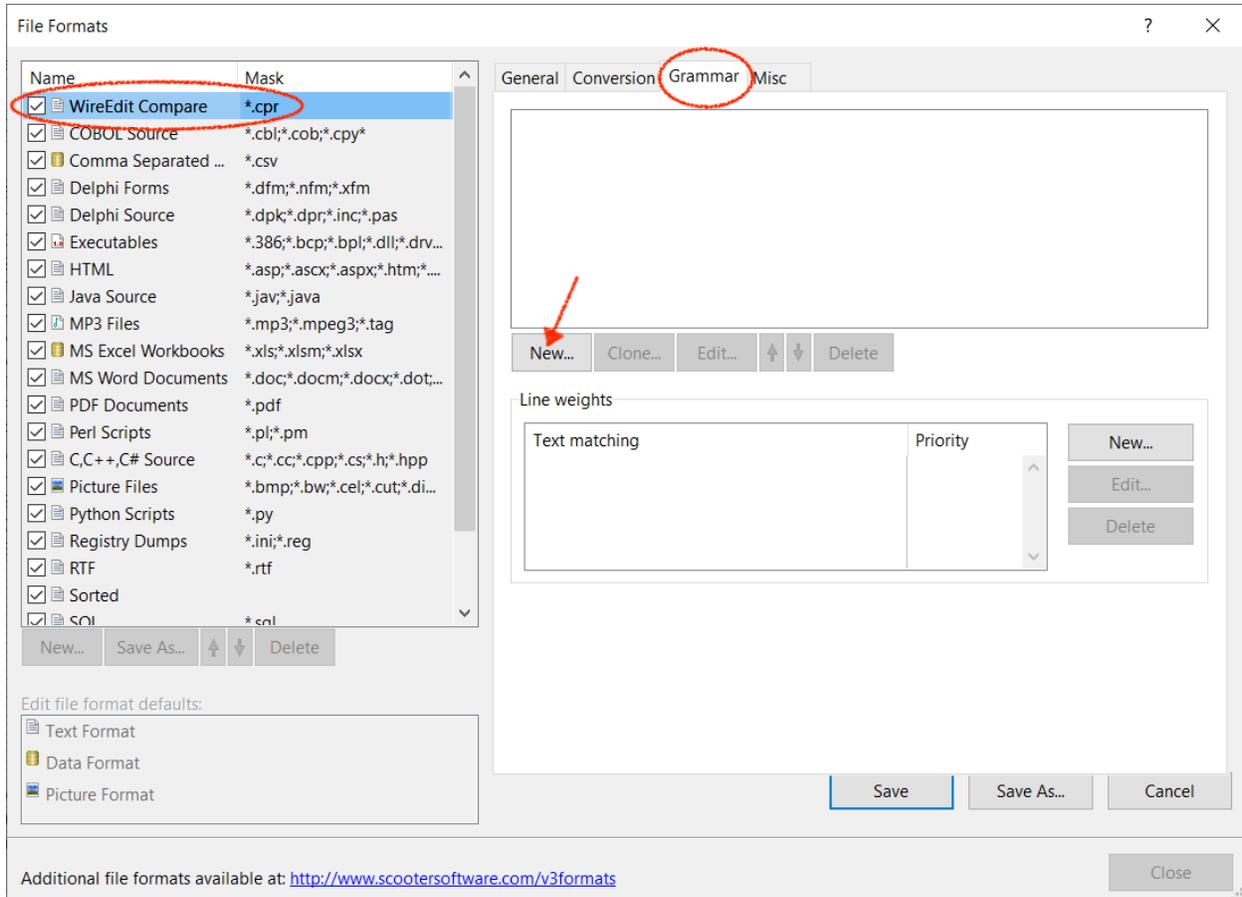
## Step 6

- Create a new file format entry by clicking New at the bottom left.
- Select Text Format.
- Name it **“WireEdit Compare”**.
- Enter the extension mask **\*.cpr** as mask at General tab page.



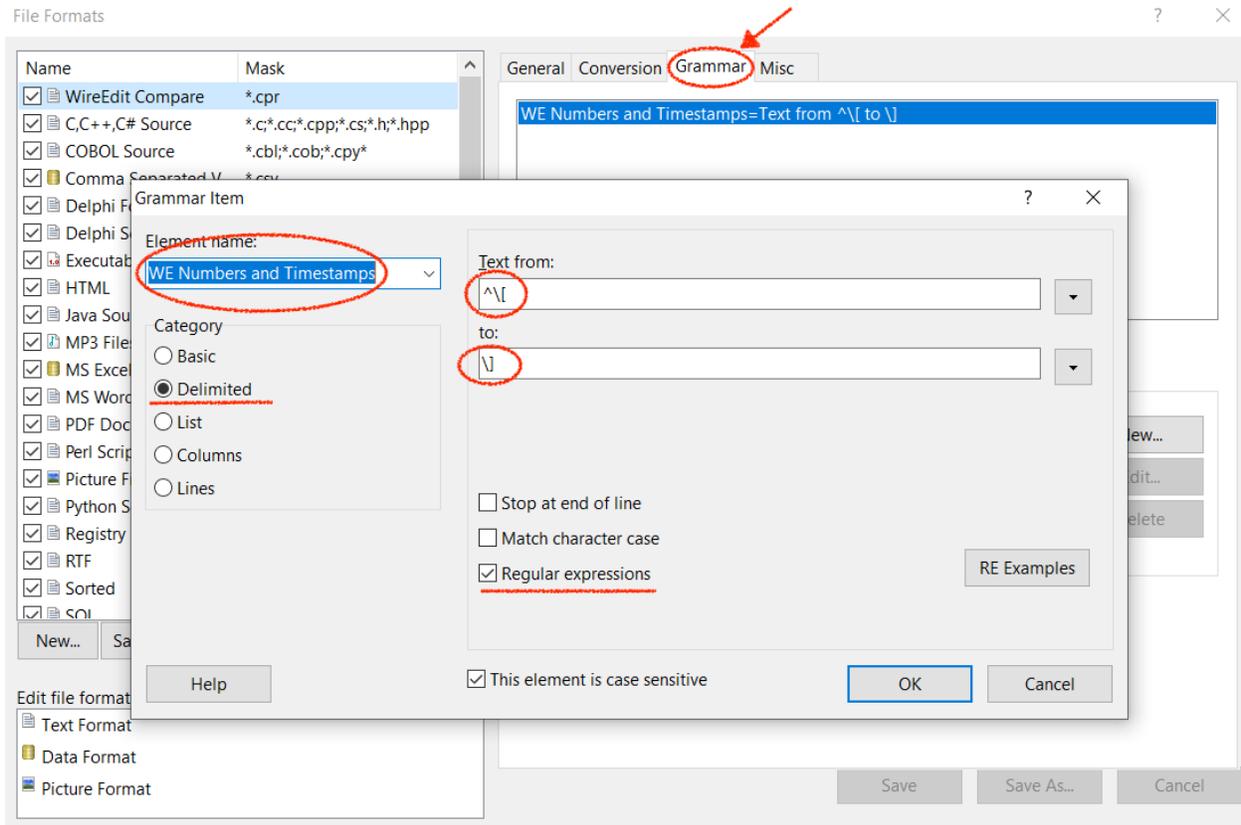
## Step 7

Select Grammar tab. Click New on the right as shown.



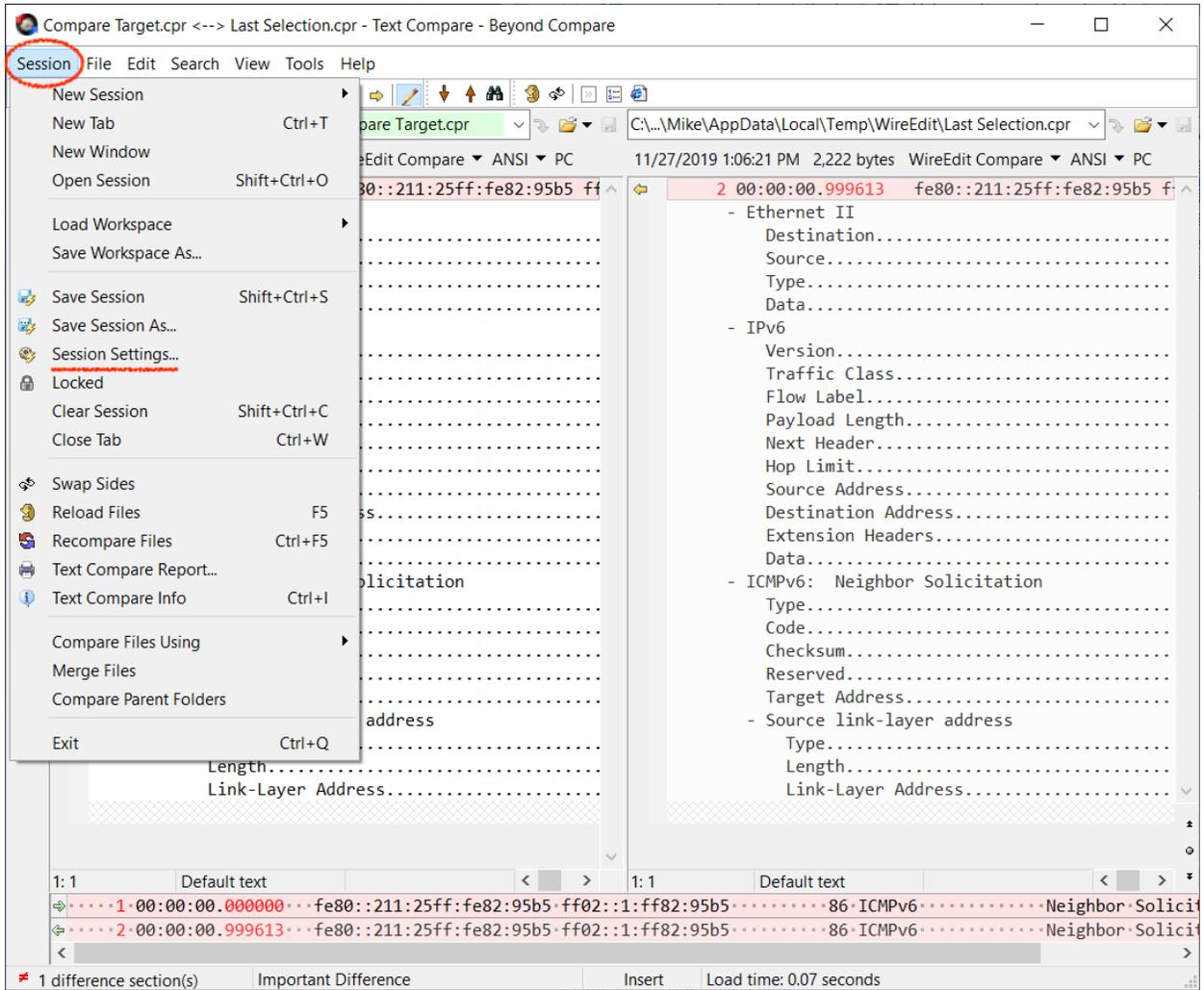
## Step 8

- Enter **“WE Numbers and Timestamps”** in “Element Name”.
- Select Delimited in “Category” list below.
- Enter **^\\** in “Text from:” field.
- Enter **\\** in “to:” field.
- Select Regular expressions below.



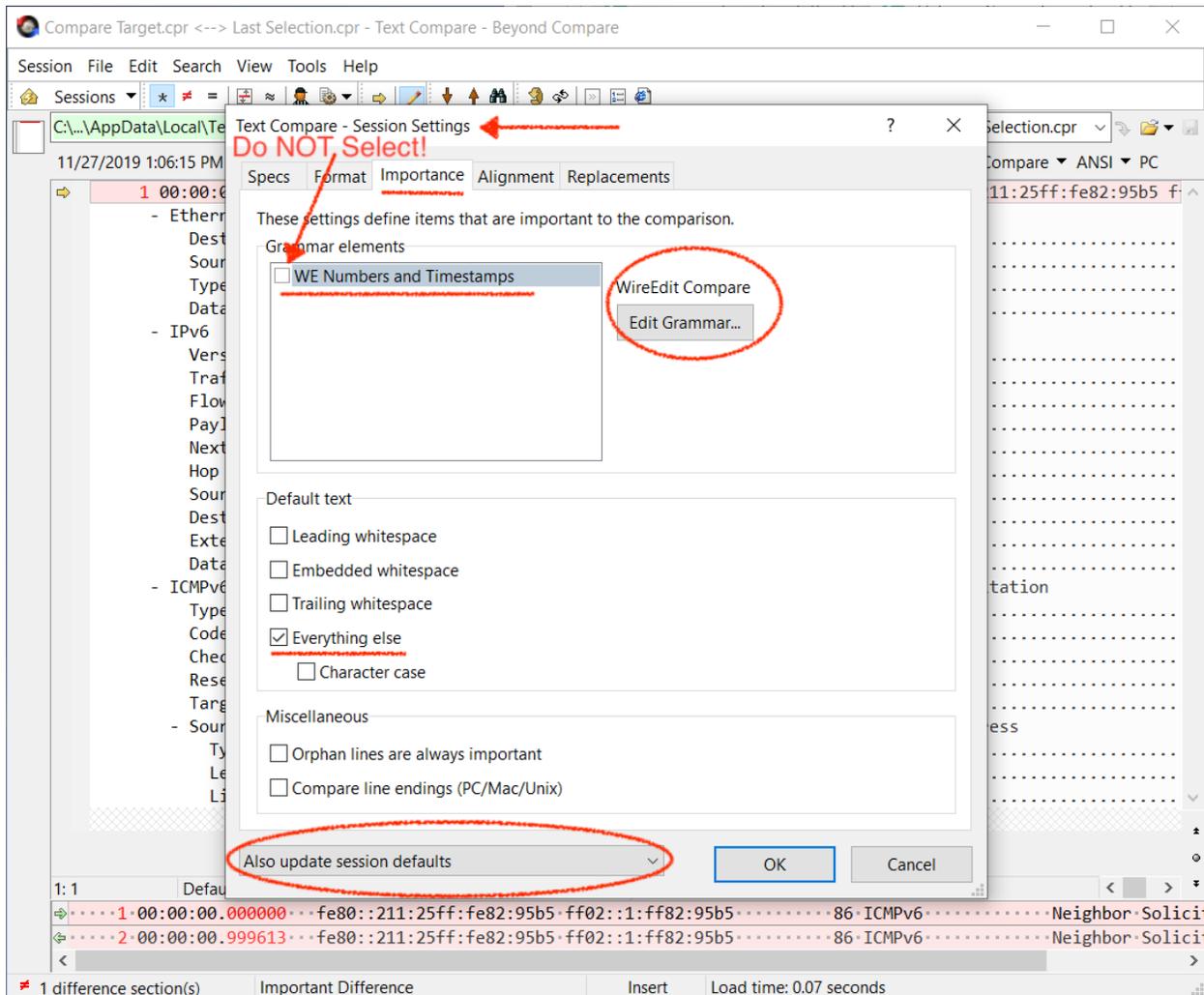
# Step 9

Select Session Settings... from Session menu.



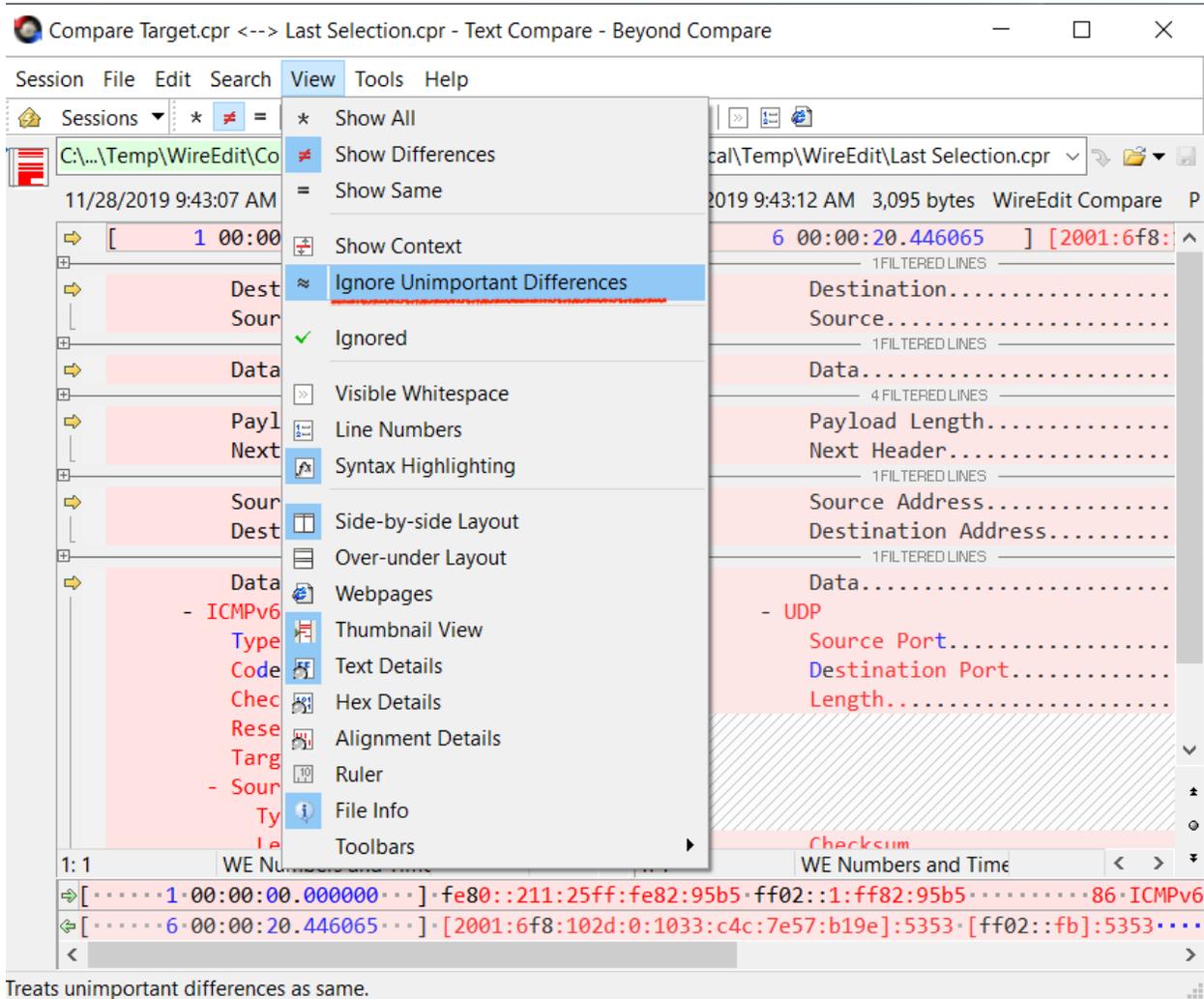
## Step 10

- Select Importance tab. See “WE Numbers and Timestamps” in “Grammar Elements” list.
- Clear** the checkbox on the left.
- Select Everything else checkbox.
- Select Auto update session defaults at the bottom.



## Step 11

Select Ignore Unimportant Differences in View menu



You are good to go. Select the range of packets, then select Set as Target to Compare from the context menu. Select another range of packets in the same or different file, then select Compare to Target from the context menu.